

Date: Thursday, 15/01/2009 11:23:31 AM  
 User: Julie Dawson

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : SLEEVE  
 Job Number : 44825  
 Estimate Number : 13173  
 P.O. Number :  
 This Issue : 15/01/2009 S.O. No. :  
 Prsht Rev. : NC Part Number : D36891  
 First Issue : / / Type : MACHINED PARTS Drawing Number : D36891 REV B  
 Previous Run : 44687 Drawing Revision : B  
 Material :  
 Due Date : 30/01/2009 Qty: 30 Um: Each  
 Written By :  
 Checked & Approved By :  
 Comment : Est Rev:A New Issue 08-02-11 JLM Verified By:EC  
 Est Rev:B Material Change 09-01-07 JLM Verified By:EC

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M174PHH900R1375	17-4PH SS ROUND BAR 1.375 COND.900
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Comment: Qty.: 0.4200 f(s)/Unit Total: 12.6000 f(s)

17-4PH SS ROUND BAR 1.375 \*\*\*\*CONDITION H-900\*\*\*\*

M110540

N/A  
POSITIVE  
RECALL

2.0	DOOSAN LATHE	DOOSAN LATHE
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Comment: Doosan Lathe

1- Turn as per Folio FA722 Rev: 1/4 &amp; Dwg D3689 Rev: 10

2-CHECK THREAD WITH GO-NO GO GAUGE DT9450 A &amp; B

- C'sink .188" hole per Dwg. -

3-Deburr per dwg D3689

09/02/05  
 09/01/30

(30)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE

Drill 1/16" holes and C'sink .188" holes as per dwg D3689

5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SLEEVE

Job Number: 44825

Part Number: D36891

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

*Jul 09.02.05*

*(30)*

7.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: *8149*

*C 209/02/05*

LPI Per ASTM 1417 LEVEL 2

Certificate of conformaty is required

*(30)*

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure certificate of conformity is attached

*P 9/4/5*

*(30)*

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*S 09/02/05*

*(x30)*

**POSITIVE  
RECALL**

*N/A*

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *ST133*

*P 9/4/6*

*(30)*

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*D 09/02/06*

*30*

Job Completion



*C 209/02/06*

**POSITIVE RECALL**

EFFECTIVE \_\_\_\_\_ AUTH \_\_\_\_\_

RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

*N/A*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

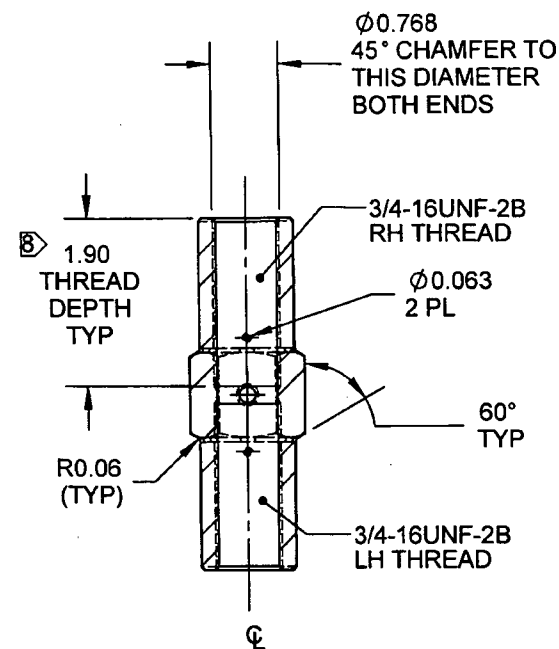
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

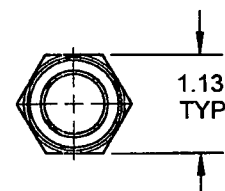
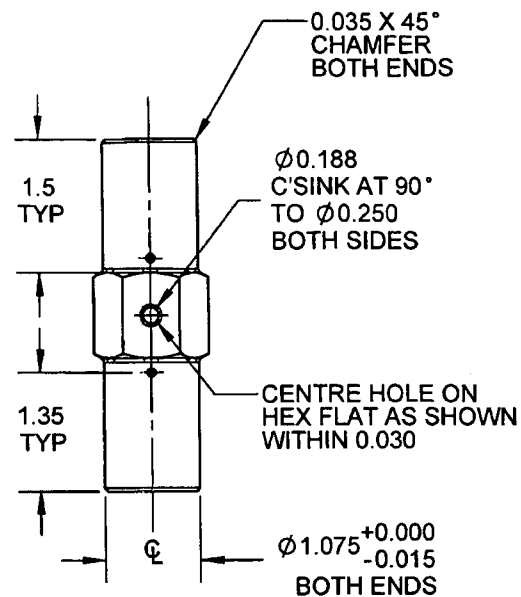
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

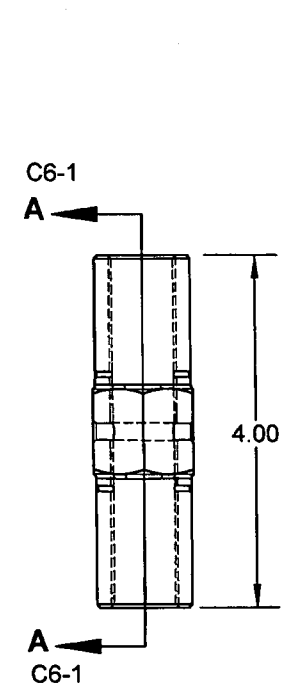




**SECTION A-A**  
D3-1



**D3689-1 SLEEVE**



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 14825

**RELEASED**  
08/12/15 JMB

**NOTES:**

- 1) MATERIAL: 17-4PH STAINLESS STEEL ROUND BAR PER AMS 5643 H-900 CONDITION
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.67 lb
- 8) DIMENSION SHOWN IS MINIMUM DEPTH OF FULL THREAD
- 9) LPI PER ASTM 1417 LEVEL 2

B	CHANGE TO 17-4PH H-900 (ZN A8-1); REFORMATTED TO CURRENT DWG STANDARDS	RF	08.11.24
A	NEW ISSUE	RF	08.05.22
REV.		BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	90	DRAWING NO.	REV. B
MFG. APPR.	21	D3689	SHEET 1 OF 1
APPROVED	11	TITLE	SCALE
DE APPR.	11	SLEEVE	NTS
DATE	08.11.24	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



## LIQUID PENETRANT TEST REPORT

P- 14932

CLIENT	DART AEROSPACE	DATE	FEB 5-2007	PAGE	1	OF	1	
ATTENTION	LINDA	ACUREN JOB NO.	188-09-001292	TIME	AM	<input checked="" type="checkbox"/>	PM	<input type="checkbox"/>
ADDRESS	1270 ABELDEEN ST. HAWKESBURY, ON K6H 1K7	PO/NO No.	845	WORK LOCATION	HAWKESBURY			
PROJECT	F.P.I. on MACHINED PARTS	ACCEPTANCE STD.	ASTM 1417	REV./DATE	2007			
ITEM(S) EXAMINED	54 MACHINED PARTS							

JOB DESCRIPTION	PROCEDURE NO. LT-XXXX	REV./DATE	TECHNIQUE NO. LT-XXXX-XXX	REV./DATE
PART NO.	MATERIAL		THICKNESS	
SCOPE	WET FLUORESCENT LIQUID PENETRANT INSPECTION CARRIED OUT ON 100% EXTERNAL.			

TEST DETAILS								
METHOD	<input checked="" type="checkbox"/> FLUORESCENT	<input type="checkbox"/> VISIBLE	<input checked="" type="checkbox"/> WATER WASH	<input type="checkbox"/> SOLVENT REMOVABLE	<input type="checkbox"/> POST EMULSIFIED			
FAMILY BRAND	MAGNAFLUX		BLACK LIGHT S/N	0071	<input type="checkbox"/> OUTPUT > 1000 $\mu$ W/cm <sup>2</sup>	<input type="checkbox"/> AMBIENT < 2 fc		
PENETRANT	2L 67	MINIMUM DWELL TIME	450	MIN.	LIGHTING EQUIP.	<input type="checkbox"/> FLASHLIGHT	<input type="checkbox"/> TROUBLELIGHT	<input type="checkbox"/> OUTPUT > 100 fc @ SURFACE
PENETRANT REMOVER	H2O	MINIMUM DRY TIME	>10	MIN.	OTHER			
DEVELOPER	SKD 52	MINIMUM DWELL TIME	10	MIN.	LIGHT METER S/N			CAL DUE DATE FEB-09
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS	<input type="checkbox"/> AQUEOUS	<input type="checkbox"/> DRY					

TEST SURFACE					
SURFACE CONDITION	<input type="checkbox"/> AS GROUND	<input type="checkbox"/> AS WELDED	<input type="checkbox"/> MACHINED	<input type="checkbox"/> SHOT BLASTED	<input checked="" type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	<input type="checkbox"/> < -4°C/ 20°F	<input type="checkbox"/> -4°C/ 20°F TO 10°C/50°F	<input type="checkbox"/> 10°C/50°F TO 52°C/125°F	<input type="checkbox"/> > 52°C/125°F	

RESULTS- ( <input type="checkbox"/> METRIC <input type="checkbox"/> IMPERIAL)			
ITEM	COMMENTS	ACCEPT	REJECT
30 PCS - JOB# 44825		✓	
24 PCS - JOB# 45485		✓	
ALL 54 PARTS OF THESE JOB #'S HAVE BEEN 100% EXTERNAL EXAMINED AND FOUND ACCEPTABLE.		02/02/05	

**Scope of Services**  
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

**Standard of Care**  
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES		DTR # E-19809	
CLIENT REPRESENTATIVE	Jan Titley		
TECHNICIAN (SIGNATURE):	Mike Johnston	REPORT REVIEWED BY:	
NAME (PRINT):	Mike Johnston	NAME INITIALS	
CGSB LEVEL	1 <sup>ST</sup> TECHNICIAN	CGSB LEVEL	2 <sup>ND</sup> TECHNICIAN
CGSB REG. NO.	6666	CGSB REG. NO.	

WHITE - CLIENT COPY

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